

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/S22,297  
Source: PCT  
Date Processed by STIC: 2-2-05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 02/02/2005

PATENT APPLICATION: US/10/522,297

TIME: 15:22:03

Input Set : A:\MER137SEQ.TXT

Output Set: N:\CRF4\02022005\J522297.raw

4 <110> APPLICANT: MERCK PATENT GMBH  
 5 BAKER, Matthew  
 6 CARR, Francis J.  
 8 <120> TITLE OF INVENTION: T-CELL EPITOPES IN ERYTHROPOIETIN  
 11 <130> FILE REFERENCE: MER-137  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/522,297  
 C--> 13 <141> CURRENT FILING DATE: 2005-01-24  
 13 <150> PRIOR APPLICATION NUMBER: PCT/EP2003/008725  
 14 <151> PRIOR FILING DATE: 2003-08-07  
 16 <150> PRIOR APPLICATION NUMBER: EP02017914.9  
 17 <151> PRIOR FILING DATE: 2002-08-09  
 19 <160> NUMBER OF SEQ ID NOS: 61  
 21 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 166  
 25 <212> TYPE: PRT  
 26 <213> ORGANISM: Homo sapiens  
 28 <400> SEQUENCE: 1  
 29 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu  
 30 1 5 10 15  
 31 Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His  
 32 20 25 30  
 33 Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe  
 34 35 40 45  
 35 Tyr Ala Trp Lys Arg Met Glu Val Gly Gln Gln Ala Val Glu Val Trp  
 36 50 55 60  
 37 Gln Gly Leu Ala Leu Leu Ser Glu Ala Val Leu Arg Gly Gln Ala Leu  
 38 65 70 75 80  
 39 Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu Gln Leu His Val Asp  
 40 85 90 95  
 41 Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr Leu Leu Arg Ala Leu  
 42 100 105 110  
 43 Gly Ala Gln Lys Glu Ala Ile Ser Pro Pro Asp Ala Ala Ser Ala Ala  
 44 115 120 125  
 45 Pro Leu Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val  
 46 130 135 140  
 47 Tyr Ser Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala  
 48 145 150 155 160  
 49 Cys Arg Thr Gly Asp Arg  
 50 165  
 53 <210> SEQ ID NO: 2  
 54 <211> LENGTH: 33  
 55 <212> TYPE: PRT

(p5.6)

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56 <213> ORGANISM: Homo sapiens
58 <400> SEQUENCE: 2
59 Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu Ala Glu Asn Ile
60 1 5 10 15
61 Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu Asn Ile Thr Val
62 20 25 30
63 Pro
67 <210> SEQ ID NO: 3
68 <211> LENGTH: 33
69 <212> TYPE: PRT
70 <213> ORGANISM: Homo sapiens
72 <400> SEQUENCE: 3
73 Arg Gly Gln Ala Leu Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu
74 1 5 10 15
75 Gln Leu His Val Asp Lys Ala Val Ser Gly Leu Arg Ser Leu Thr Thr
76 20 25 30
77 Leu
81 <210> SEQ ID NO: 4
82 <211> LENGTH: 33
83 <212> TYPE: PRT
84 <213> ORGANISM: Homo sapiens
86 <400> SEQUENCE: 4
87 Arg Thr Ile Thr Ala Asp Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser
88 1 5 10 15
89 Asn Phe Leu Arg Gly Lys Leu Lys Leu Tyr Thr Gly Glu Ala Cys Arg
90 20 25 30
91 Thr
95 <210> SEQ ID NO: 5
96 <211> LENGTH: 21
97 <212> TYPE: PRT
98 <213> ORGANISM: Homo sapiens
100 <400> SEQUENCE: 5
101 Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser
102 1 5 10 15
103 Leu Asn Glu Asn Ile
104 20
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 21
109 <212> TYPE: PRT
110 <213> ORGANISM: Homo sapiens
112 <400> SEQUENCE: 6
113 Arg Gly Gln Ala Leu Leu Val Asn Ser Ser Gln Pro Trp Glu Pro Leu
114 1 5 10 15
115 Gln Leu His Val Asp
116 20
119 <210> SEQ ID NO: 7
120 <211> LENGTH: 21
121 <212> TYPE: PRT
122 <213> ORGANISM: Homo sapiens

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124 <400> SEQUENCE: 7
125 Thr Phe Arg Lys Leu Phe Arg Val Tyr Ser Asn Phe Leu Arg Gly Lys
126 1 5 10 15
127 Leu Lys Leu Tyr Thr
128 20
131 <210> SEQ ID NO: 8
132 <211> LENGTH: 12
133 <212> TYPE: PRT
134 <213> ORGANISM: Homo sapiens
136 <400> SEQUENCE: 8
137 Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala
138 1 5 10
141 <210> SEQ ID NO: 9
142 <211> LENGTH: 15
143 <212> TYPE: PRT
144 <213> ORGANISM: Homo sapiens
146 <400> SEQUENCE: 9
147 Lys Val Val Asp Gln Ile Lys Lys Ile Ser Lys Pro Val Gln His
148 1 5 10 15
151 <210> SEQ ID NO: 10
152 <211> LENGTH: 15
153 <212> TYPE: PRT
154 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: Potential epitope sequences
159 <400> SEQUENCE: 10
160 Ala Pro Pro Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr
161 1 5 10 15
164 <210> SEQ ID NO: 11
165 <211> LENGTH: 15
166 <212> TYPE: PRT
167 <213> ORGANISM: Artificial Sequence
169 <220> FEATURE:
170 <223> OTHER INFORMATION: Potential epitope sequences
172 <400> SEQUENCE: 11
173 Arg Leu Ile Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu
174 1 5 10 15
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 15
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Potential epitope sequences
185 <400> SEQUENCE: 12
186 Cys Asp Ser Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu
187 1 5 10 15
190 <210> SEQ ID NO: 13
191 <211> LENGTH: 15
192 <212> TYPE: PRT

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Input Set : A:\MER137SEQ.TXT

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```

193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Potential epitope sequences
198 <400> SEQUENCE: 13
199 Arg Val Leu Glu Arg Tyr Leu Leu Glu Ala Lys Glu Ala Glu Asn
200 1          5          10          15
203 <210> SEQ ID NO: 14
204 <211> LENGTH: 15
205 <212> TYPE: PRT
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Potential epitope sequences
211 <400> SEQUENCE: 14
212 Glu Arg Tyr Leu Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr
213 1          5          10          15
216 <210> SEQ ID NO: 15
217 <211> LENGTH: 15
218 <212> TYPE: PRT
219 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: Potential epitope sequences
224 <400> SEQUENCE: 15
225 Leu Leu Glu Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala
226 1          5          10          15
229 <210> SEQ ID NO: 16
230 <211> LENGTH: 15
231 <212> TYPE: PRT
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Potential epitope sequences
237 <400> SEQUENCE: 16
238 Ala Lys Glu Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys
239 1          5          10          15
242 <210> SEQ ID NO: 17
243 <211> LENGTH: 15
244 <212> TYPE: PRT
245 <213> ORGANISM: Artificial Sequence
247 <220> FEATURE:
248 <223> OTHER INFORMATION: Potential epitope sequences
250 <400> SEQUENCE: 17
251 Ala Glu Asn Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn
252 1          5          10          15
255 <210> SEQ ID NO: 18
256 <211> LENGTH: 15
257 <212> TYPE: PRT
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Potential epitope sequences
263 <400> SEQUENCE: 18

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## RAW SEQUENCE LISTING

DATE: 02/02/2005

PATENT APPLICATION: US/10/522,297

TIME: 15:22:03

Input Set : A:\MER137SEQ.TXT

Output Set: N:\CRF4\02022005\J522297.raw

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264 Ile Thr Thr Gly Cys Ala Glu His Cys Ser Leu Asn Glu Asn Ile
265 1          5          10          15
268 <210> SEQ ID NO: 19
269 <211> LENGTH: 15
270 <212> TYPE: PRT
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: Potential epitope sequences
276 <400> SEQUENCE: 19
277 Gly Cys Ala Glu His Cys Ser Leu Asn Glu Asn Ile Thr Val Pro
278 1          5          10          15
281 <210> SEQ ID NO: 20
282 <211> LENGTH: 15
283 <212> TYPE: PRT
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Potential epitope sequences
289 <400> SEQUENCE: 20
290 Glu His Cys Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys
291 1          5          10          15
294 <210> SEQ ID NO: 21
295 <211> LENGTH: 15
296 <212> TYPE: PRT
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Potential epitope sequences
302 <400> SEQUENCE: 21
303 Ser Leu Asn Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe
304 1          5          10          15
307 <210> SEQ ID NO: 22
308 <211> LENGTH: 15
309 <212> TYPE: PRT
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Potential epitope sequences
315 <400> SEQUENCE: 22
316 Glu Asn Ile Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp
317 1          5          10          15
320 <210> SEQ ID NO: 23
321 <211> LENGTH: 15
322 <212> TYPE: PRT
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Potential epitope sequences
328 <400> SEQUENCE: 23
329 Thr Val Pro Asp Thr Lys Val Asn Phe Tyr Ala Trp Lys Arg Met
330 1          5          10          15
333 <210> SEQ ID NO: 24
334 <211> LENGTH: 15

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 02/02/2005  
PATENT APPLICATION: US/10/522,297      TIME: 15:22:04

Input Set : A:\MER137SEQ.TXT  
Output Set: N:\CRF4\02022005\J522297.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:61; Xaa Pos. 25,35,88,91,93,95,141,142,144,145,148,149,153

## VERIFICATION SUMMARY

DATE: 02/02/2005

PATENT APPLICATION: US/10/522,297

TIME: 15:22:04

Input Set : A:\MER137SEQ.TXT

Output Set: N:\CRF4\02022005\J522297.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No  
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:822 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
L:828 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:834 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:841 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:848 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:855 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:860 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:61  
L:863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:16  
M:341 Repeated in SeqNo=61